Amendments to the specification:

Please replace the paragraph beginning at page 2, line 2 with the following rewritten paragraph:

This invention relates to a color coordinate ~~measurment~~ measurement system and more specifically to an RGB primary color point identification and measurement system.

Please replace the paragraph beginning at page 2, line 6 with the following rewritten paragraph:

There is a continuous stride to improve the ways ~~tocalibrate~~ to calibrate color images generated by electronic systems, such as scanners, ~~displayes~~displays, printers, etc. With the increasing use of light emitting diodes (LEDs) in a variety of applications, many ~~manufactureres~~ manufacturers of devices that employ LEDs need efficient and reliable schemes to ensure quality and consistency in their products.

Please replace the paragraph beginning at page 2, line 18 with the following rewritten paragraph:

An exemplary use of LEDs is in the process of generating a white light by employing primary colors of Red, Green and Blue (RGB) LEDs. For example, many LCD monitors use an array of red, green and blue LEDs to generate a white backlight. In order to ensure that the white light has a consistent color temperature and intensity, many manufacturers employ complex calibration schemes which ~~leads~~ lead to higher manufacturing costs.

Please replace the paragraph beginning at page 3, line 1 with the following rewritten paragraph:

The reason that it is difficult to ensure that a device such as a monitor generates a consistent white backlight is that the color coordinates for each of the red, green and blue light sources ~~is~~ are hard to measure. In accordance with one prior art scheme, it is possible to measure the color coordinates for each primary red, green and blue light sources by performing a sequential measurement procedure as explained below.

Please replace the paragraph beginning at page 3, line 14 with the following rewritten paragraph:

Thus, there is a need for a system that can accurately and economically measure the color coordinates for each of the primary red, green and blue light sources, such as LEDs, so as to generate a consistent and ~~deisred~~ desired white light, or for that ~~measure~~ matter, any light that employs these three primary light sources.

Please replace the paragraph beginning at page 3, line 20 with the following rewritten paragraph:

In accordance with one embodiment of the present invention, a primary color identification system includes a plurality of red, green and blue LED light sources configured to generate a desired RGB light having ~~a~~ specified chromaticity coordinates. A color filter, such as a tristimulus filter, is disposed near the generated RGB light,

and is coupled to a processor that is employed to measure the chromaticity coordinates of each of the red, green and blue LED light sources. The system also includes a controller and driver circuitry that is configured to control and maintain the intensity of light (or lumen output level) generated by each of the red, green and blue LEDs. The system for a given intensity of the red, green and blue LED light source, measures the intensity of the generated RGB light, while the color filter measures the chromaticity coordinates of the generated RGB light. Based on these measurements, the system is configured to detect the chromaticity coordinates of each of the red, green and blue LED light sources.

Please replace the paragraph beginning at page 4, line 10 with the following rewritten paragraph:

Once the chromaticity coordinates of the LED light sources is known, the system configures the controller and ~~dirver~~ driver circuitry to maintain the desired intensity (or lumen output level) of each of the red, green and blue LED light sources, so as to maintain the desired chromaticity coordinates of the generated RGB light.

Please replace the paragraph beginning at page 4, line 15 with the following rewritten paragraph:

In accordance with another embodiment of the invention, a method for determining the color coordinates of primary colors that together generate a desired ~~ligth~~ light source, is introduced. The primary colors that generate a desired light source may be red, green and blue LED light sources. The method

includes the step a) of setting the intensity of each of said red, green and blue light sources at a specified test level. The method is followed by the step b) of measuring the color coordinates of the combined light source by using a color filter. The method then repeats the preceding two steps a) and b) in step c), so as to measure a plurality of color coordinates of the combined light source, each coordinate corresponding to a different set of test intensity levels for each of the red, green and blue light sources. ~~The~~ Step c) of the method is followed by the step d) of measuring the primary color coordinates of each of the red, green and blue LED ~~ligth~~ light sources, and finally, providing a feedback arrangement to maintain the intensity of the three LED light sources at a level that leads to a combined light source with a desired chromaticity coordinate.

Please replace the paragraph beginning at page 5, line 5 with the following rewritten paragraph:

In accordance with another embodiment of the invention, the different intensity values for each red, green and blue light source ~~is~~ are set such that for each set the intensity value of the combined light source remains the same. In accordance with yet another embodiment of the invention many test sets are employed and the primary color coordinates for each of the red, green and blue light sources ~~is~~ are calculated by applying a least mean square estimation technique.

Please replace the paragraph beginning at page 6, line 14 with the following rewritten paragraph:

A filter 14 is disposed in front of monitor 12 so as to measure certain characteristics of the white light generated by LCD monitor 12. As will be explained in more detail later in reference with Figs. 4 and 5, filter 14 in accordance with one embodiment of the invention comprises a photo sensor with color filters that together operate as - what is known in the industry as - a tristimulus filter.

Please replace the paragraph beginning at page 6, line 20 with the following rewritten paragraph:

Filter 14 is coupled to an interface circuit 16 that is configured to receive the signals generated by filter 14, and condition these signals for use with a primary color identification processor 18. ~~As such processor~~Processor 18 is coupled to interface 16, and is configured to take the steps necessary to determine the color coordinates of individual red, green and blue LED light sources employed in monitor 12.

Please replace the paragraph beginning at page 7, line 3 with the following rewritten paragraph:

The operation and structure of tristimulus filter 14 is well known. Figs. 4(a), 4(b) and 4(c) illustrate block diagrams of three exemplary tristimulus filters that are employed in accordance with various embodiments of the invention. Basically, a tristimulus filter is configured such that the spectral response functions of the filters are directly proportional to the color-matching functions of CIE standard ~~colorometric~~ colorimetric observers.

Please replace the paragraph beginning at page 7, line 20 with the following rewritten paragraph:

To this end, Fig. 5(a) illustrates a plot 180 which depicts the spectral response functions and the degree to which a photocell, such as 154, combined with tristimulus filters 140 may best duplicate the color-matching functions of the CIE 1931 standard observer. The solid curves illustrate the CIE standard observer data, and the dotted curves illustrate response of the photocell with tristimulus filter arrangement.

Please replace the paragraph beginning at page 8, line 3 with the following rewritten paragraph:

Other examples of tristimulus filters are illustrated in Figs. 4(b) and 4(c) wherein filter glass layers are disposed over a filter substrate. Therefore, as illustrated in Fig. 4(b) a substrate 168 receives a glass layer 166, overlapped by a glass layer 164, which in turn is overlapped with a glass layer 162. Fig. 4(c) illustrates another variation of glass layers on a substrate 178 wherein layer 172 does not completely cover layer 174, and layer 174 does not completely cover layer 176.

Please replace the paragraph beginning at page 8, line 10 with the following rewritten paragraph:

To this end, Fig. 5(b) illustrates a plot 210 which depicts the spectral response functions and the degree to which a photocell, such as 154, combined with the tristimulus filters 160 or 170, may best duplicate the color-matching functions of

the CIE 1931 standard observer. The solid curves illustrate the CIE standard observer data, and the dotted curves illustrate response of the photocell with tristimulus filter arrangement

Please replace the paragraph beginning at page 12, line 7 with the following rewritten paragraph:

Fig. 3 is a flow chart of a process employed by processor 18 (Fig. 1) to identify the coordinates of color points for each of the red, green, and blue LED light sources, for example, used in monitor 12. At step 110, the processor begins a testing procedure to make the coordinate estimates. Thus at step 112, processor 18 initializes and also sets the number of times n, through which the testing procedure will be accomplished.

Please replace the paragraph beginning at page 12, line 19 with the following rewritten paragraph:

At step 116, processor 18 measures the color coordinates of the light generated in response to test signal levels set for red, green and blue LEDs. To this end, tristimulus filter 14 provides output levels X_{w1} , Y_{w1} , and Z_{w1} . From this ~~values~~value, processor 18 calculates the corresponding color coordinates x_{w1} and y_{w1} of the light generated by the combination of red, green and blue LEDs based on

$$x_w = \frac{X_w}{X_w + Y_w + Z_w} \qquad (5)$$

$$y_w = \frac{Y_w}{X_w + Y_w + Z_w} \qquad (6)$$